CHAPTER 1

INTRODUCTION

The introduction chapter gives an overview of the background information on the foreign exchange risk exposure, the definition of the research problem and the purpose of the study. The significance and scope of the study are also discussed in this chapter. The organisation of the thesis' report structure is presented in the final part of this chapter.

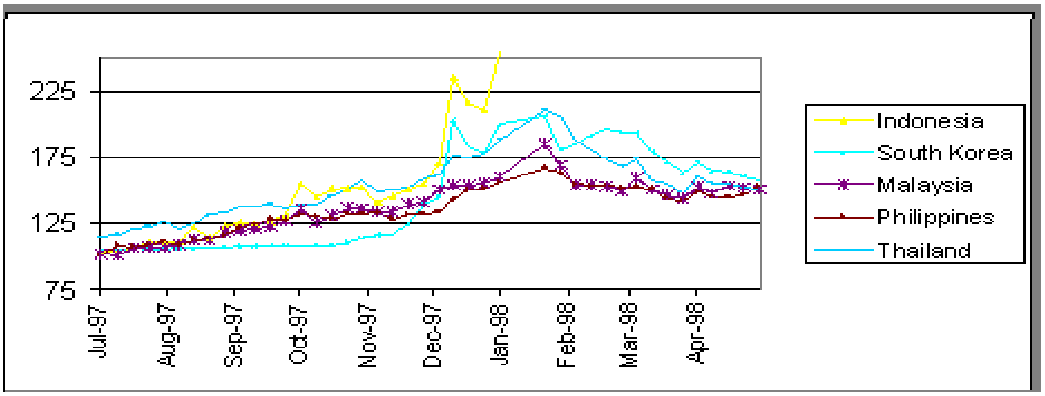
1.1 Overview of Foreign Exchange Risk Exposure

Since globalization, the world's economy structure and business environment have been changing according to the times. It has become more competitive and challenging, especially with the increased risk of uncertainty and threats. Developed or developing countries have domestic and international firms that are coping with risk brought on by a globalized world. One of the important concerns is the foreign exchange risk. Foreign exchange risk has been on the rise since the breakdown of the Bretton Wood agreement in 1973. It was then when the foreign exchange rate system changed from a fixed to a floating rate system. The adoption of a floating regime has not only created flexibility in foreign exchange rate fluctuation, but it has also heightened the foreign exchange risk exposure in international business.

In 1997, the East Asia economic crisis made apparent how vulnerable currencies can be. The speculative attacks on currencies almost devastated the economy. The Indonesian Rupiah and South Korean Won lost almost half of their value. According to Garay (2003), the Asian financial crisis started with the devaluation of Thailand's baht on 2nd July 1997, followed by the Philippine Peso, Ringgit Malaysia, Indonesian Rupiah and to a lesser extent, the Singaporean Dollar. These currencies suffered a massive speculative attack and currency crisis. Figure 1.1.1 below shows the monthly currency evolution of the five South-East Asia countries during the Asian crisis (Garay, 2003). The upward movement of the local currency rate against the U.S. dollar indicated that the local currency value was actually depreciating and unstable.

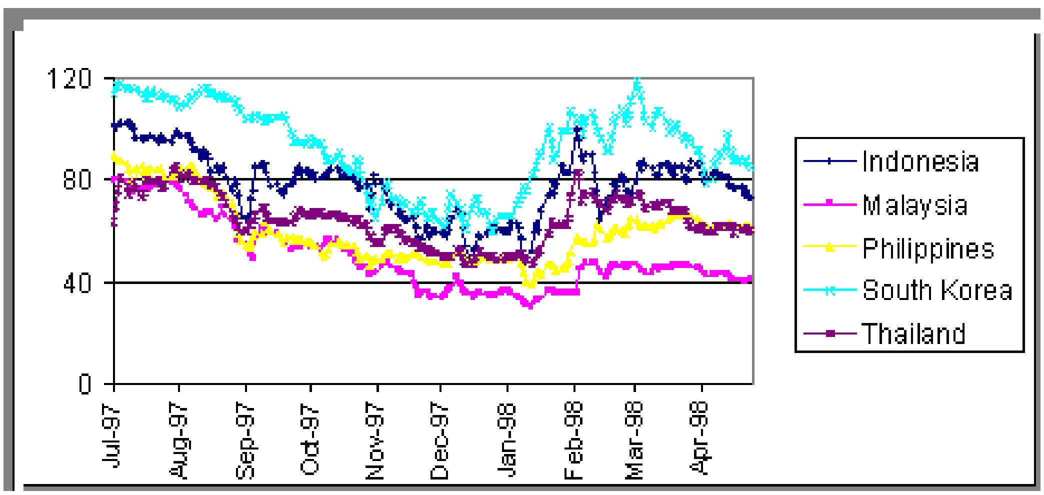
As a result of the weakening, these countries were forced to take recovery actions by pegging their currencies. This means that interest rates were raised to fend-off repeated speculative attacks on the currencies to help strengthen the economy. Nevertheless, the crisis brought a significant impact to these countries as it increased the volatility of the financial markets and capital flows. The massive outflow of capital from South-East Asia countries caused the local currency and stock markets to collapse as illustrated by figure 1.1.2. However, these currencies managed to regain their stability from January 1998 onwards, which subsequently led to more international business transactions but with an increase in protection.

Figure 1.1.1
Evolution of Asian Currencies during the Crisis (01/97 = 100, currency per US$)



Source: Garay (2003)

Figure 1.1.2
Evolution of Asian Stock Markets during the Crisis (01/97, Local currencies)



Source: Garay (2003)

Similarly, Malaysia's economy had also been exposed to foreign exchange risk when it opened up its market to globalization since 1970's. Ringgit Malaysia became weak particularly against the U.S. dollar where the Ringgit Malaysia depreciated 40% in the course of one year. At the same time, share prices fell by 52% and this forced the Malaysian Government to introduce a new exchange rate policy. In Sept 1998, the Ringgit Malaysia was pegged against the U.S. dollar (Table 1.1.1) to minimize and stabilize currency fluctuation, which significantly affected bilateral trade. Decisively, the Ringgit Malaysia was fixed to the U.S. dollar at RM3.80 to USD1, which was commonly used in commercial and public dealings. The fixed exchange rate system allowed monetary and fiscal policies to be taken at their own merit without fear that the currency will fall and also reduces the opportunity for speculation (Khor, 2009). However, Malaysia still remained strong and stable during that time as it had a relatively low foreign short-term debt burden that lessened the impact on real economy.

Table 1.1.1
Official Exchange Rate Regimes in the Asian Crisis Countries

Indonesia	November 1978-June 1997	Managed Floating
	July 1997- December 2000	Independently Floating
Korea	March 1980-October 1997	Managed Floating
	November 1997- December 2000	Independently Floating
Malaysia	January 1986-February 1990	Limited Flexibility
	March 1990-November 1992	Fixed
	December 1992-September 1998	Managed Floating
	September 1998- December 2000	Pegged Arrangement
Philippines	January 1988- December 2000	Independently Floating

Source: International Monetary Fund, 2004

Due to the crisis, risk-averse firms became concerned of the risk and initiated various steps to protect themselves from potential exchange rate losses. If compared to the period prior to 1997, Malaysian firms were complacent and passive when it came to managing the foreign exchange due to a lesser expectation of a significant impact from currency risk exposure. The pegging and foreign exchange risk management that were proactively established by

Malaysian multinationals (Yazid and Muda, 2006) successfully minimized the exposure or losses.

The economy showed signs of recovery from 2000 onwards. On 23rd July 2005, the Malaysian Government decided to unpeg the Ringgit Malaysia from the U.S. dollar for the benefit of the economy, as well as for the firms that were actively transacting business across national borders to enable business growth. Subsequent to the unpegging, the Ringgit Malaysia began to appreciate against the U.S. dollar. It increased by 6% in 2006 and contributed to a healthy foreign exchange reserve with continuous growth in export and foreign investment in the United States, China and Japan. Bank Negara is consistently stabilizing and maintaining the value of Ringgit Malaysia against a trade-weighted index of Malaysia's major trading partners by ensuring the exchange rate remains close to the fair value (Khor, 2009). Malaysia will continue to maintain the policy of non-internationalization of the Ringgit Malaysia under the managed float regime.

Then, the worst economic crisis in history hit the United States in mid 2006. It was named the subprime mortgage financial crisis or credit crunch. Later, it became a global financial crisis, which started from mid 2007. The crisis led the U.S. economy downturn, which eventually created a significant impact on the economy in other regions such as Europe, Asia Pacific and the Middle East. These regions have significant trade relationships with the United States, which has been the dominant player or the world economy's major importer all this while. The U.S. dollar is the main denomination used in most international business transactions.

Although Malaysia has operated under the managed floating regime since 2005, this does not prevent firms in Malaysia (whether domestic or international) from being affected by foreign exchange volatility during the crisis. As a result, the currency risk in businesses increased. The exposure is expected to increase due to the rapid growth of globalization. Also, Malaysian firms are moving onto the multinational platform by expanding their operations into foreign countries. They do that either through direct foreign investments or by actively engaging in international trade such as exports and imports. Similarly, multinational firms that have a permanent presence in Malaysia will be influenced by the foreign exchange risk exposure, and the level of exposure depends on the stability of the Ringgit Malaysia against the origin country's currency.

Exporting and importing firms tend to have a higher foreign exchange risk, particularly when dealing in foreign denominations that are unpredictable such as the U.S. dollar that has been very volatile. Pure domestic firms with no foreign trade engagements will be directly exposed to the exchange rate changes in a competitive foreign market, especially in the long run. During the credit crisis, when Malaysia's economy was deteriorating, firms in Malaysia encountered more challenges and risks. Businesses took a longer time to recover as the world economy was picking up at a slow pace.

Over time, the exchange rate flexibility changed a firm's behaviour, firm's value and riskiness through various channels such as the stock return, operating cash flow, revenues, costs as well as the profitability of the business. The firm's business operation and financial growth were affected by the expected and unexpected changes in the foreign exchange rate that motivated firms to engage in hedging to avoid losses. A growing number of firms and businesses found themselves suffering and helpless in the wake of the drastic exchange rate movement. Trades or projects, which seemed profitable, turned into losses due to the exchange rate fluctuations. However, there were certain firms that were not affected by the exchange rate changes at all. Therefore, exploring the foreign exchange exposure should be interesting and meaningful.

1.2 Research Problems

Based on the overview, firms have been directly or indirectly exposed to the foreign exchange rate risk for decades. Recently, the economic crisis caused by the instability of foreign currency fluctuations created difficulty and problems for the business environment. This is particularly so in export and import dealings or debt payments in foreign currency, which incur foreign exchange gains or losses. Firms are concerned of the drop in business profitability and insufficient cash flow if the currency continues to be volatile. Consequently, this impacts business growth and expansion.

Besides that, investors are worried that the return on investment will depreciate due to the foreign exchange risk and may seek other opportunities that provide higher returns to compensate the risk, which subsequently increases the firms' cost of equity. Firms may decide to pass on the exchange rate losses to customers if the losses significantly affect the business. They do that by increasing the selling price, but such actions may cause the firm to lose its customers or demand markets.

In order to mitigate the risk, firms would have to decide whether to hedge or not. It depends on the cost, benefit analysis and the tolerable risk level. If they decide to hedge, the firms will have to consider the timing, appropriate planning, strategies or hedging tools to avoid any serious business implications that will inflate unnecessary business costs and reduce shareholders' value. Therefore, a better understanding of the foreign exchange risk exposure is vital to minimize business risk and for long term growth.

1.3 Objectives of the Study

In the past, many researchers heavily focused on foreign exchange exposure as their area of research because the volatility caused great uncertainty to the economic and financial environment. Meanwhile, firms also faced uncertainty in their stock returns, earnings, cash flows, sales and shareholders' wealth. However, these findings (Fraser and Pantzalis, 2003; Ihrig and Prior, 2005; Jayasinghe and Tsui, 2008) appear to be inconclusive in supporting the relationship between changes in the exchange rate and the firm's value. They also provided weak evidence in determining the significant level of the foreign exchange risk impact towards countries or firms. However, these interesting approaches, evidences and findings in past researches have motivated this study to further investigate the foreign exchange exposure among listed firms in Malaysia since there are not many studies done within the Malaysian context.

The main purpose of this study is to increase our understanding of the relationship between the changes of foreign exchange rate and stock returns at the individual firm level. It also tries to gauge how significant the foreign exchange risk exposure in Malaysia is by way of looking at the time varying effect. Thus, two objectives motivating the study have been established. They are:-

1) To examine whether the stock returns of Malaysian firms are influenced by or exposed to the changes in foreign exchange rate.
2) To compare and evaluate whether there are differences in the foreign exchange exposure before and during the recent economic crisis.

1.4 Research Questions

Based on the objective of the study, two research questions and issues have been identified (listed below) and their findings are presented in Chapter 4 under the results and analysis section. Hypotheses will be developed based on the questions below:-

1) Are stock returns significantly exposed to the exchange rate changes?
2) Are there any differences in the foreign exchange exposure between the pre-crisis and post-crisis period?

1.5 Purpose and Significance of the Study

A good understanding of foreign exchange exposure is crucial to economists, policymakers, governments, firms, investors and customers. Foreign exchange fluctuation, regardless of the size of exposure, level of risk or degree of variability is expected to have an impact on the economy and business environment in the medium or long term. A few empirical studies concluded that the foreign exchange variability increased stock market volatility, which resulted in the increase of the firm's value as well as its financial and business risk. Therefore, identifying the exposure is very useful to corporate financial managers, investors, analysts and bankers – all of whom desire to have a greater understanding of the nature of exposure to enable them to make business or investment planning and corporate hedging and investment decisions.

Corporate hedging strategies and risk management are able to successfully mitigate the foreign exchange risk provided the strategy is properly planned, implemented and assessed. A clear understanding of the exposure is also a prerequisite to risk management and is important to enable the hedging strategy to provide a more effective and positive impact on the firm's value. However, firms may decide to remain unhedge if, in the long term economic exposure, firm perceived costs for hedging outweigh perceived benefits for the firm or firm presumes that the exposure is less significant.

Mun (2007) emphasizes that understanding of the role of international stock and foreign exchange markets is important for international investors when selecting the optimal investment strategy. Thus, he conducted a study to examine how and to what extent the equity market volatility and cross-market correlations are influenced by exchange rate fluctuations. He chose eight mature markets such as the United States, United Kingdom, Germany and Singapore.

Similarly, this paper attempts to help investors examine how common stock returns of firms react to the exchange rate fluctuations when making financial decisions. It also assists financial managers in measuring and identifying the foreign exchange rate risk level – whether a systematic or diversifiable risk. In addition, the empirical results of this study should be able to provide corporate managers and investors some insights as to whether Malaysian firms are significantly exposed to foreign exchange rate changes by looking at different perspectives and circumstances. Comparing the exposure before, during and after the crisis will give implication as to whether the level of foreign exchange exposure is subject to economic situation changes that encourage firms to take precautions during the crisis. The result of the study is able to guide firms, investors and other relevant parties to be more focused on foreign exchange risk exposure. The information is then applied when making financial and business decisions that affect the growth of business.

Apart from that, this study is expected to provide academicians more information about foreign exposure and motivate them to further the study using a different perspective, concept or theory. The importance of the study should not be ignored but should be noticed for its value to many parties.

1.6 Scope of the study

The study investigates the significance of foreign exchange rate changes on stock returns in Malaysia. For the purposes of this study, non-financial firms with high market capitalization on Bursa Malaysia are selected. This criterion is chosen to control the size of the firm. The study emphasizes on the exposures of larger firms because based on assumption and rationale, well-established firms are more likely to be exposed to a higher risk. Firms are not restricted to the nature of its business and they can be from different industries. Besides the firms' stock prices, exchange rates are also critical to this study.

The study looks at currencies that are mainly used in trade in Malaysia. Although Malaysia's trade structure has changed quite significantly over the last three decades, the direction of Malaysia's trade generally remains the same where ASEAN, Europe, East Asia, the United States and Japan continue to be Malaysia's major trading partners (Mohammed, 2005). Therefore, this study pin points three major currencies that are expected to have a significant influence on the firms. They are the U.S. dollar, EURO dollar and Japanese Yen. Below are the graphs extracted from the Exchange-Rates.org website. They show the 2009 daily substantially volatile exchange rate movements for Ringgit Malaysia against the currencies mentioned above.

Figure 1.6.1
180 Days of Exchange Rate History for the Ringgit Malaysia Against the U.S. dollar

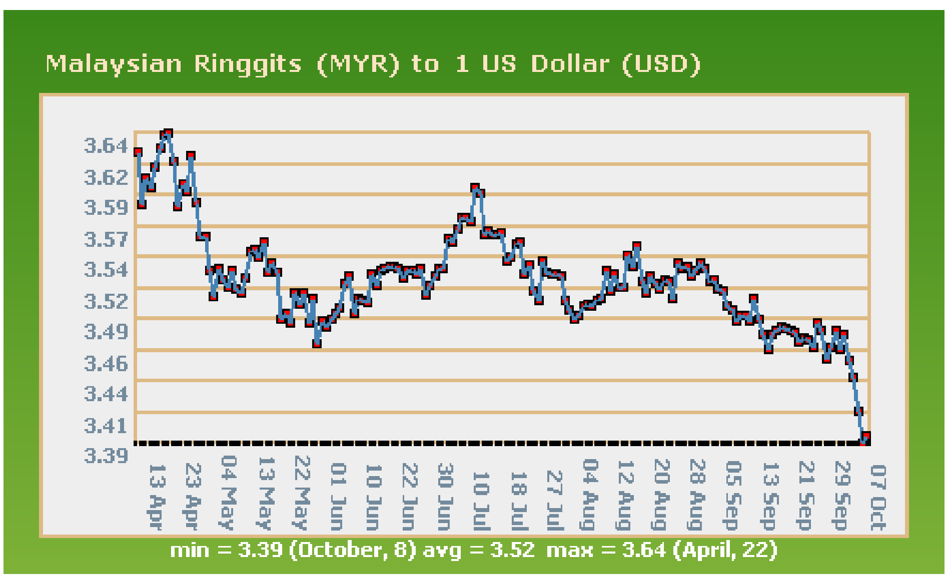


Figure 1.6.2
180 Days of Exchange Rate History for the Ringgit Malaysia against the EURO dollar

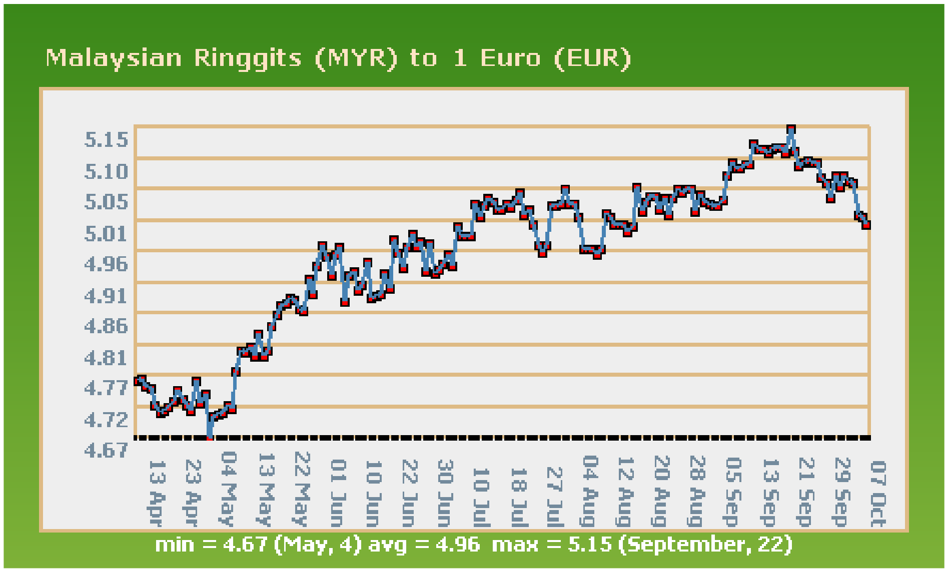
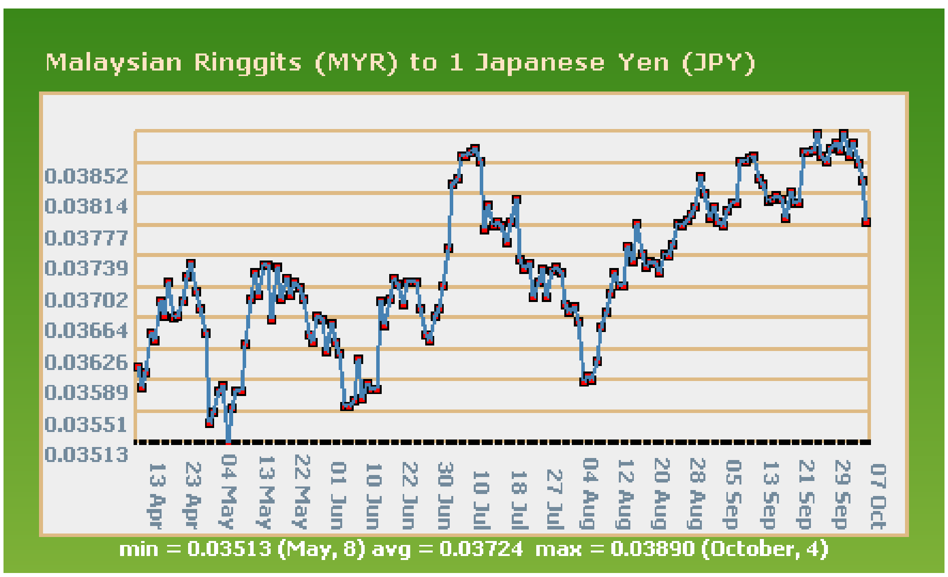


Figure 1.6.3
180 Days of Exchange Rate History for the Ringgit Malaysia against the Japanese Yen



A few assumptions were made for the purpose of the study. First, the study considers the transaction and economic exposures for both the short and long terms. Next, the study takes into consideration the impact or effect of any hedging activities and netting of exposure. Third is the assumption that stock prices are stated at fair price with no under or over stated value. The final assumption is that the secondary data gathered from market sources are reliable and valid.

1.7 Organization of the study

This report consists of five chapters which are outlined below:

Chapter 1: The introduction chapter contains background information on foreign exchange risk exposure, definition of the research problem and the purpose of the study. This chapter also presents the significance and scope of the study. The summary and overview structure of the study are at the end of this chapter.

Chapter 2: The chapter reviews previous literature and articles that have motivated and supported this study on foreign exchange risk exposure. The chapter starts with the overview of the exposure, followed by the attributes and magnitude of the exposure, and the type of methodologies applied by past researchers. Finally, the literature review summary is presented.

Chapter 3: This chapter discusses the research methodology employed in the study. First, the research framework is developed to connect the variables: mainly stock returns and foreign exchange rate changes. After that, a hypothesis is established to express the relationship between the variables in the form of a testable statement. Finally, the research model is determined to analyze the data collected from the sampling design.

Chapter 4: This chapter documents the empirical results and discusses all the findings of this study. First of all, the results and analysis will be presented based on the hypothesis of the study. A statistic table of summary is used. The summary of results is then presented at the end of this chapter.

Chapter 5: The final chapter presents the conclusion and summary of this research. First, an overview of the study including research objectives will be presented. After that, the conclusion of the research results and findings are discussed. Limitations of the study are also included in this chapter. Then, this paper provides a few suggestions for further research and finally gives valuable and important recommendations, as well as their implications.

1.8 Conclusion

This first chapter discusses the introduction and overview of the study. The introduction covers the research problem, research objectives, research questions, purpose and significance including the scope of the study. Lastly, the chapter presents the structure or organization of the remaining chapters in this study. In the following chapter, the literature and articles on foreign exchange risk exposure is reviewed.